

FTL: FASTER THAN LIGHT SHIP TIERS

Survey results from (and for) the playing community on Reddit

Monday, July 28, 2014

INTRODUCTION

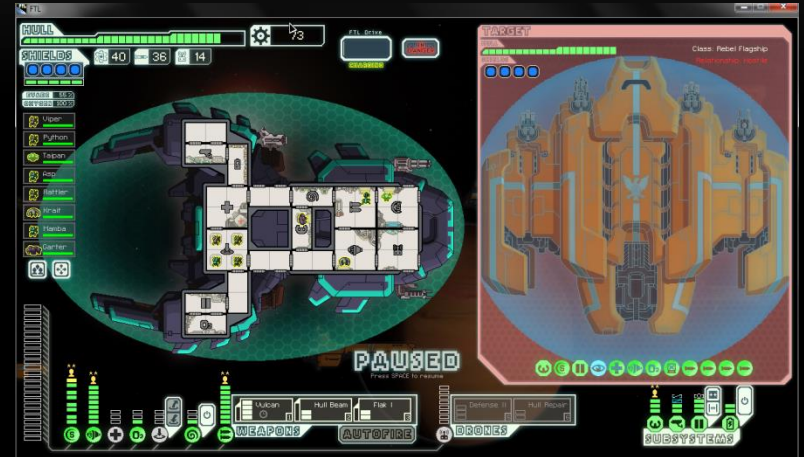
OUTLINE

-  Study Overview
 -  Ship Tiers
 -  Standard Deviation
 -  Skew Data
 -  Ship Results
-

OVERVIEW

- Ranking “ship tiers” is a common discussion topic on the *FTL* forums
 - For example, <<http://steamcommunity.com/sharedfiles/filedetails/?id=131186991>>
 - Even a more complicated issue with the release of *Advanced Edition*
- Using a sample from the “wisdom of the crowd” to generate consensus rankings
 - Law of Large Numbers (LLN) states a large sample across a number of players will generate a “true” average across individual preferences and styles
- Survey through Survey Monkey the weekend of July 18 to July 20, 2014
 - Original thread here, <<http://tinyurl.com/m9jax59>>
- Results in this presentation include statistical treatments of the results
 - Mean, standard deviation, and skewness
 - Rankings and appendix of results for individual ships

THE QUESTION IS, IN ESSENCE, WHICH ONE OF THESE SETUPS (AND THE 24 OTHERS) ARE GENERALLY THE BEST?



SURVEY

- Offered participants five (5) potential rankings for the 28 ships of *FTL:AE*
 - S “uber,” A “very good,” B “average,” C “below average,” and F “poor”
 - No other descriptions or criteria given for the tiers in the poll
- Each participant had a chance to rate each ship once or not at all—this allowed the voters to leave a blank if they were unfamiliar with one of the ship setups
 - 234 total participants (N = 234) voted on at least one ship
 - The average person voted for 26.7 ships—thereby leaving 1.3 blank on average
 - Kestrel A had the most votes (234), Slug C had the least (212)
- Converted letter ratings into mathematical points system for statistical analysis
 - S = 5, A = 4, B = 3, C = 2, F = 1
 - Ships sorted into tiers based on the average rating of the voters

RESULTS

TIER S – “THE BEST OF THE BEST”

Crystal B – Carnelian

Mantis B – The Basilisk

Lanius B – The Shrike

Kestrel B – Red-Tail

TIER A – “FUNDAMENTALLY SOLID”

Zoltan B – Noether

Crystal A – Bravais

Federation A – The Osprey

Zoltan A – The Adjudicator

TIER B – “THE UPPER/LOWER MIDDLE CLASS”

Rock C – Tektite

Engi A – The Torus

Lanius A – Kruos

Kestrel A – The Kestrel

Rock B – Shivan

Slug C – Ariolimax

Stealth A – The Nesasio

Mantis A – The Gila Monster

Federation B – Nisos

Mantis C – The Theseus

Engi C – Tetragon

TIER C – “LITTLE SOMETHING MISSING”

Slug A – Man of War

Stealth B – DA-SR 12

Kestrel C – The Swallow

Federation C – The Fregatidae

Zoltan C – Cerenkov

TIER F – “THE BAD, THE UGLY”

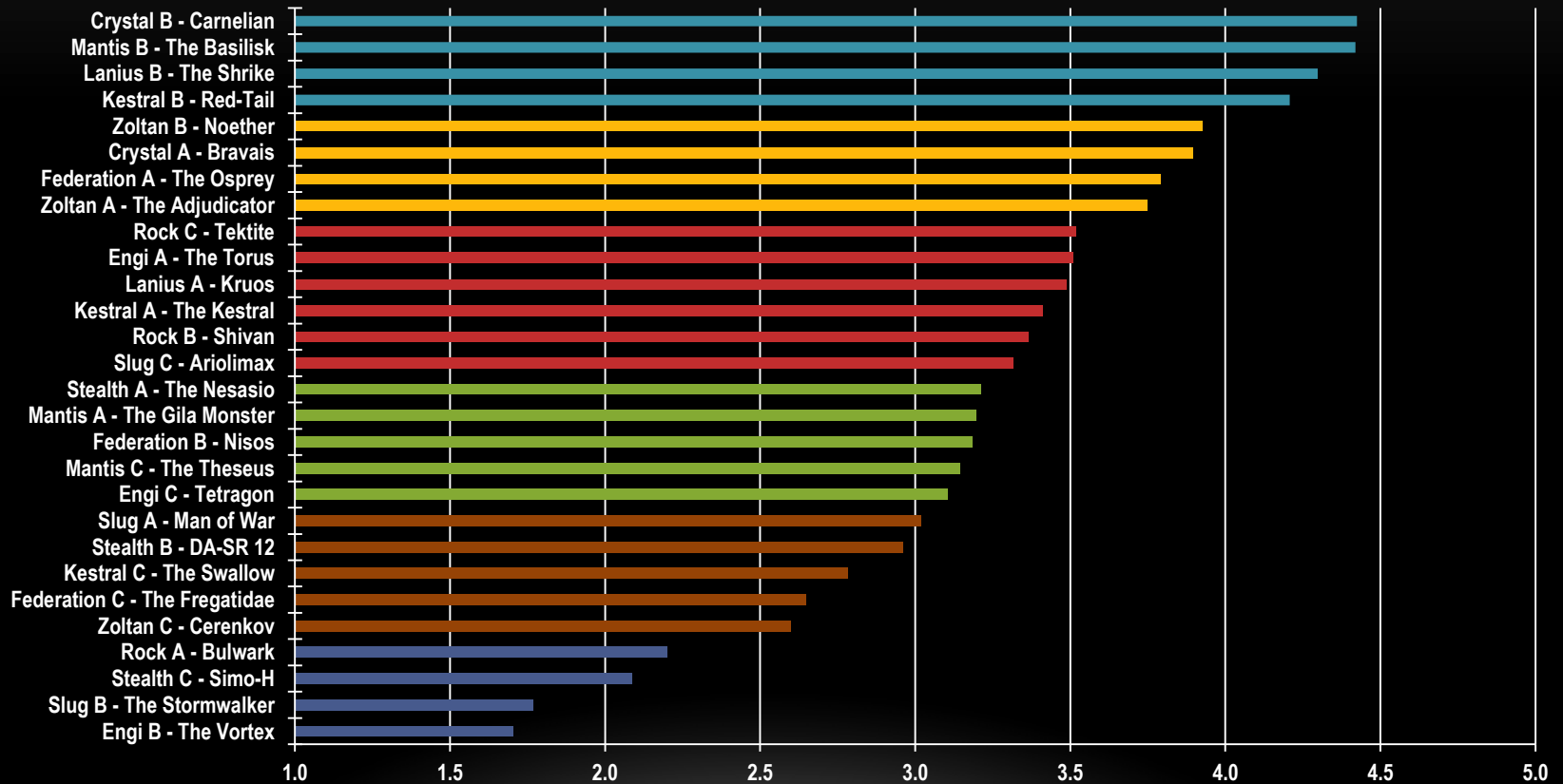
Rock A – Bulwark

Stealth C – Simo-H

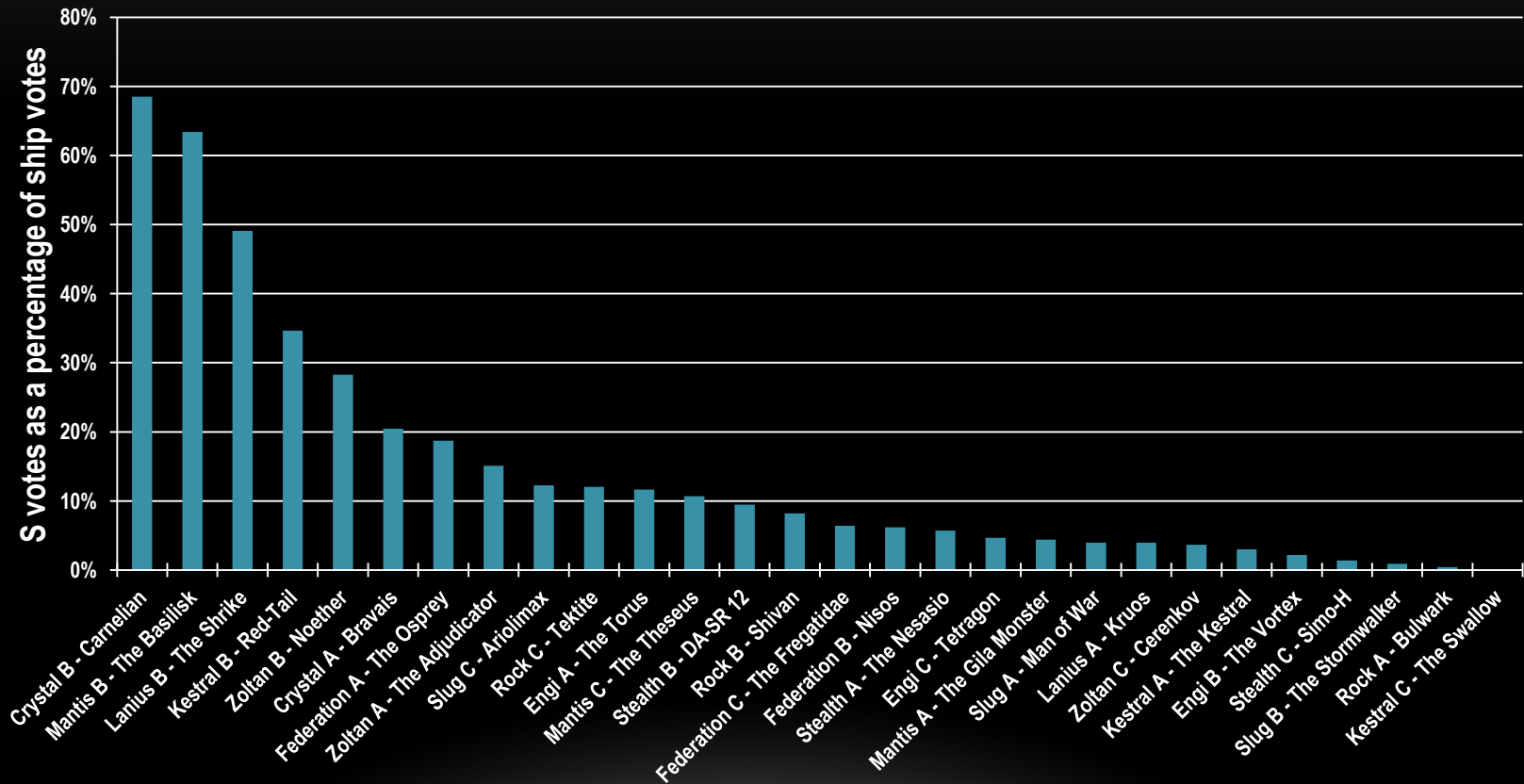
Slug B – The Stormwalker

Engi B – The Vortex

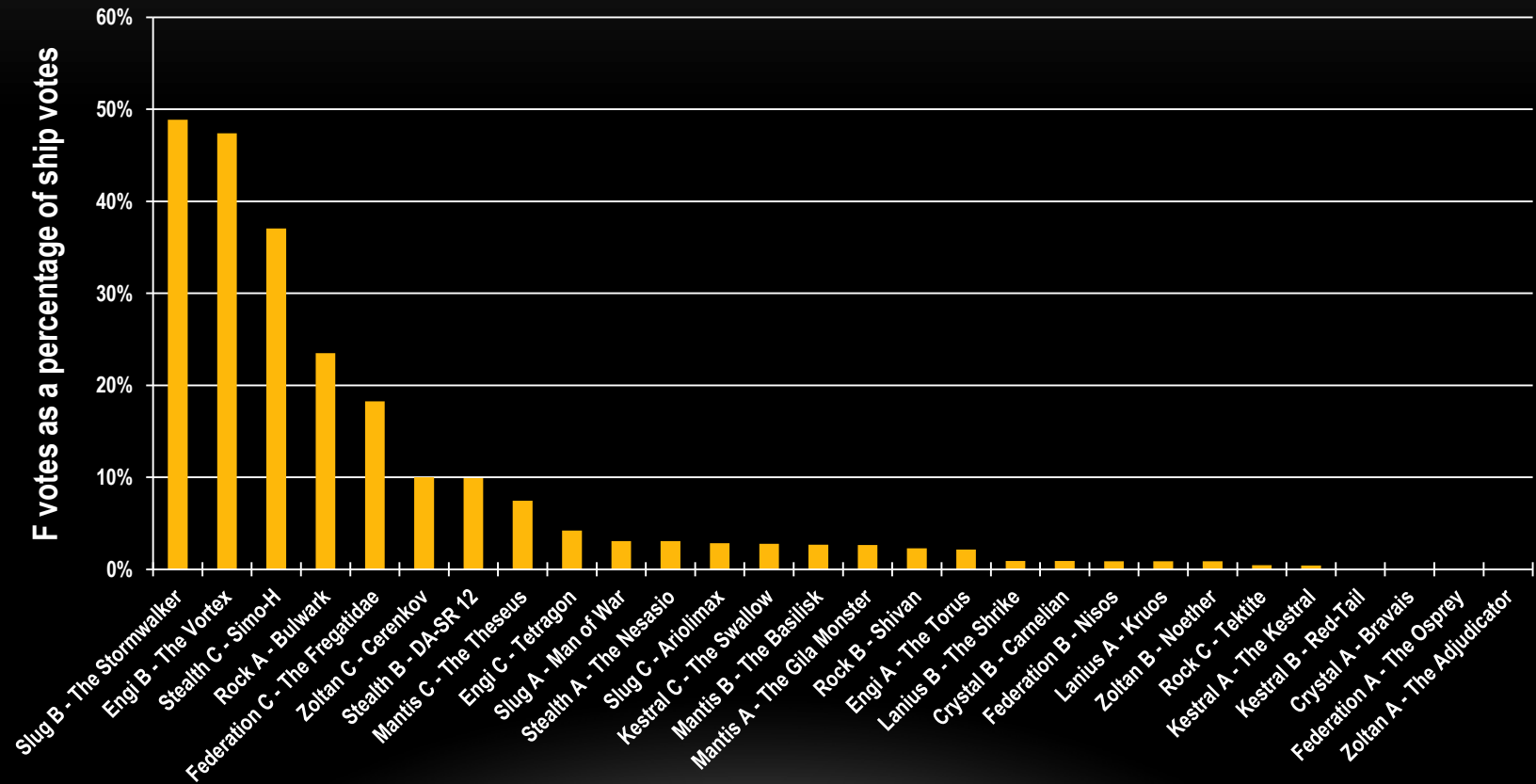
MEAN



ALTERNATIVE CALCULATION – WHAT’S THE BEST SHIP IN THE GAME?



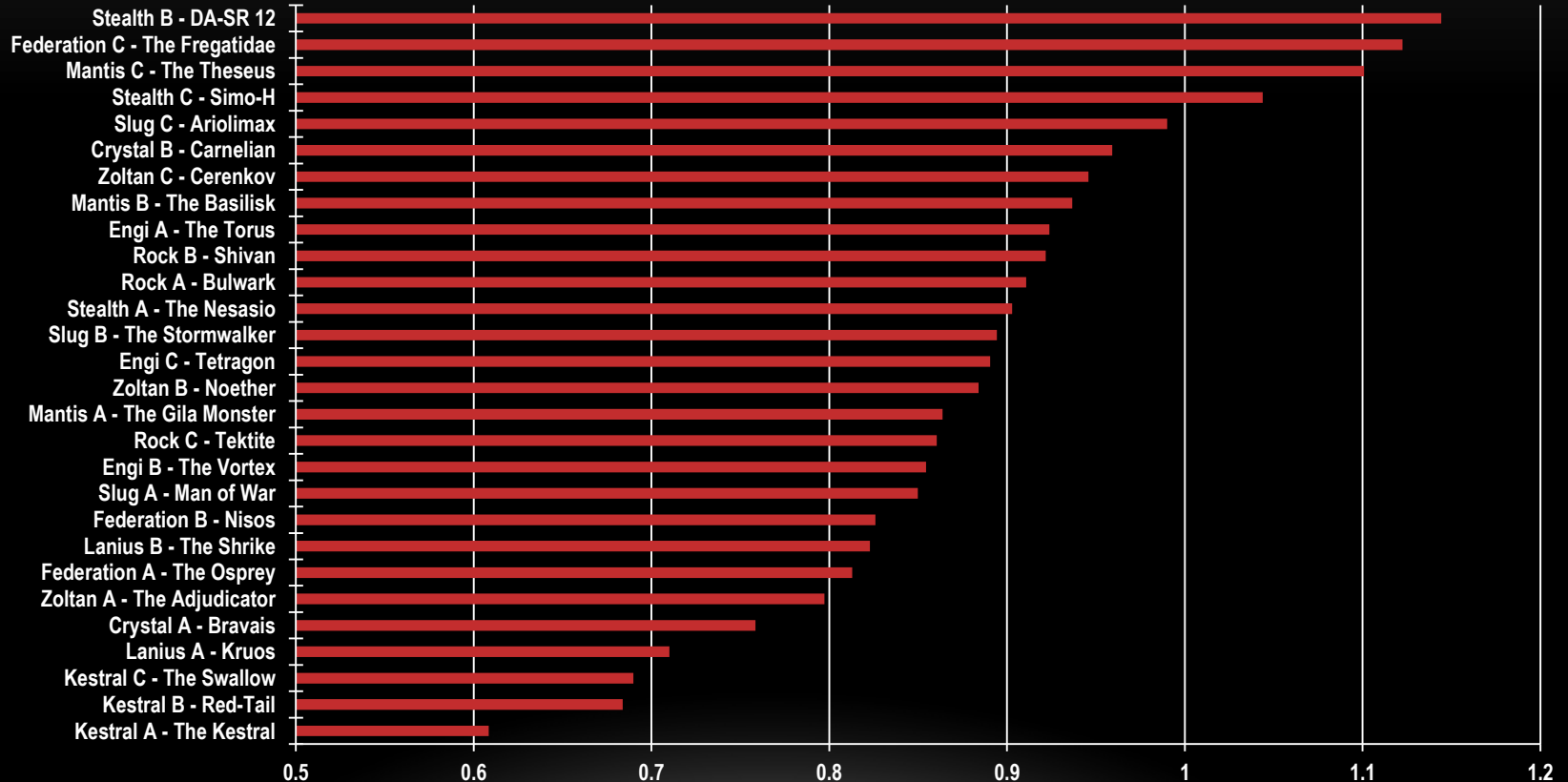
ALTERNATIVE CALCULATION – WHAT'S THE WORST SHIP IN THE GAME?



TIER DISCUSSION

- The “conventional wisdom” about the **Crystal B** and **Mantis B** being the best two ships in the game holds up in the polling and the statistic evidence from the same
 - Very close average ratings, but the **Crystal B** more “unanimous” as an S
- More B ratings than any others because of the “bell curve” in the voting’s results
 - Obvious “jump” in the B rankings between the **Slug C** and **Stealth A**
 - Sorts the B ships into an “upper middle class” of B+ ships (in red) from **Rock C** down and a “lower middle class” of B- ships (in green) from **Engi C** up
 - Hence, the data argues for six ship tiers (B+, B-) instead of the poll’s five
- Worst ship in the game a close competition between the **Slug B** and **Engi B**
 - The **Engi B** has a lower average rating based on the points system (5...1)
 - Participants voted F for **Slug B** at a higher rate than any other ship, which means more players must find it “salvageable” than the **Engi B**

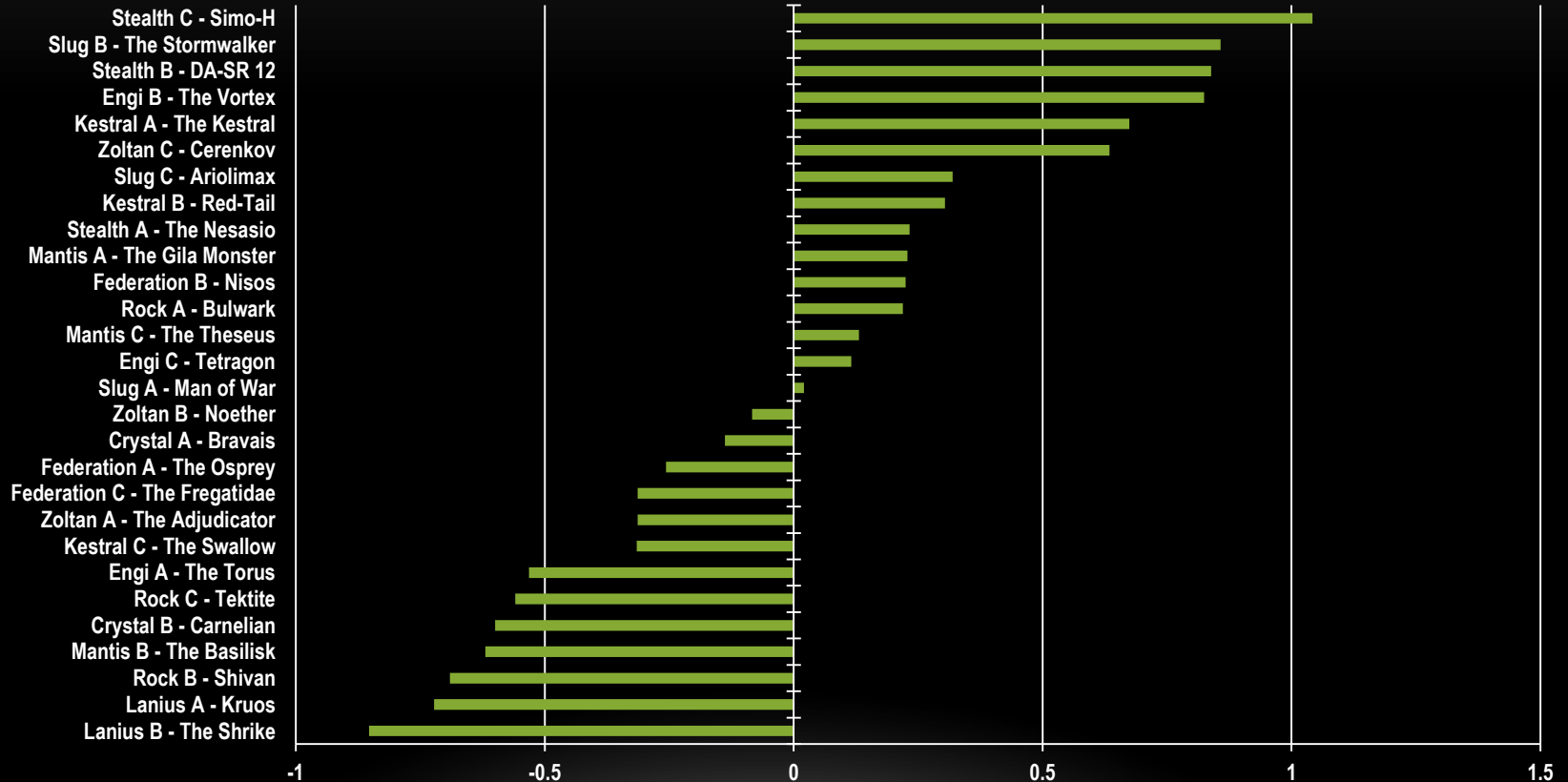
STANDARD DEVIATION



VARIABILITY DISCUSSION

- Standard deviation quantifies the variability of a data set, and therefore it serves as a good measure of how varied participants' thoughts were about the ships
- The most “controversial” ship in the game by this metric is the **Stealth B**
 - Weak start but, hey, the Glaive Beam can dominate once you start rolling
- The **Federation C** and **Mantis C**, the perennial “debate ships,” are close behind
 - Both start with teleportation but have somewhat unique/awkward weapons systems (the artillery flak and no offensive weapons, respectively) and crews
- Considerable controversy about the **Stealth C** and **Crystal A**, as well
- Ironically, the least controversial ships are the **Kestrel A**, **Kestrel B**, and **Kestrel C**
 - **Kestrel A**, the original Kestrel with the Burst Laser III we all started with and came to love, has less deviation in its ranking (B+) than any other ship

SKEWNESS



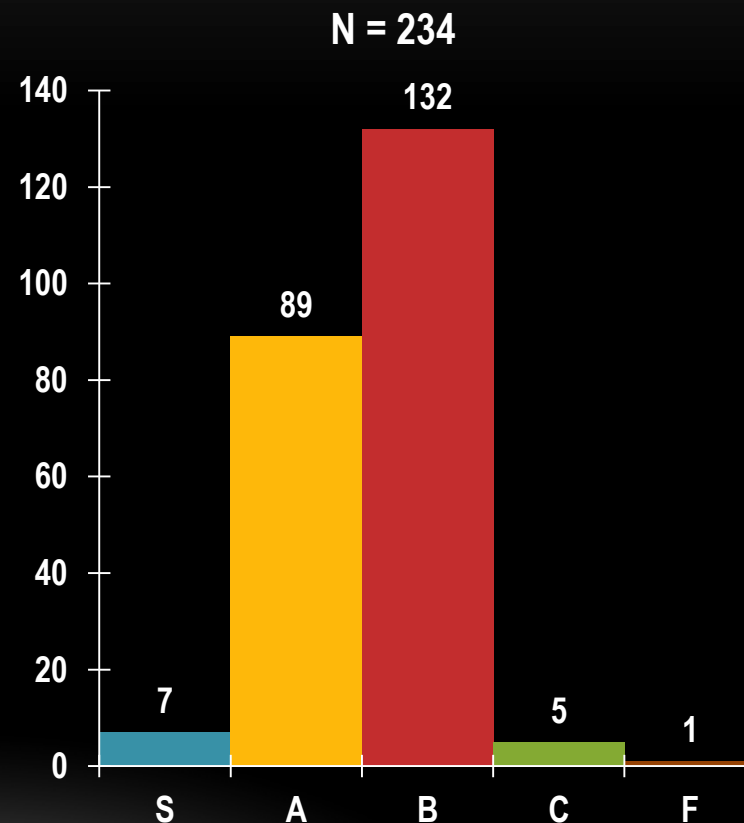
SKEW DISCUSSION

- The small range of potential responses makes this measurement less dependable
 - However, it still highlights instances where most responses different from the mean were “one-sided”—either mostly better or mostly worse than the mean
- Skewed right (>0) means, “Most think it sucks, but some think it actually rocks”
 - Low-tier ships feature heavily here with their means being close to 1
 - The **Stealth C** is the best instance with this for having the greatest skew to the right but relative better overall ratings than the **Slug B** and **Engi B**
 - **Kestrel**, **Slug**, and **Stealth** ships are the most typical classes of this type
- Skewed left (<0) means, “Most think it rocks, but some think it actually sucks”
 - High-tier ships show up here, as well, because their means are closer to 5
 - **Rock** and **Lanius** ships feature heavily here given the response data

APPENDIX

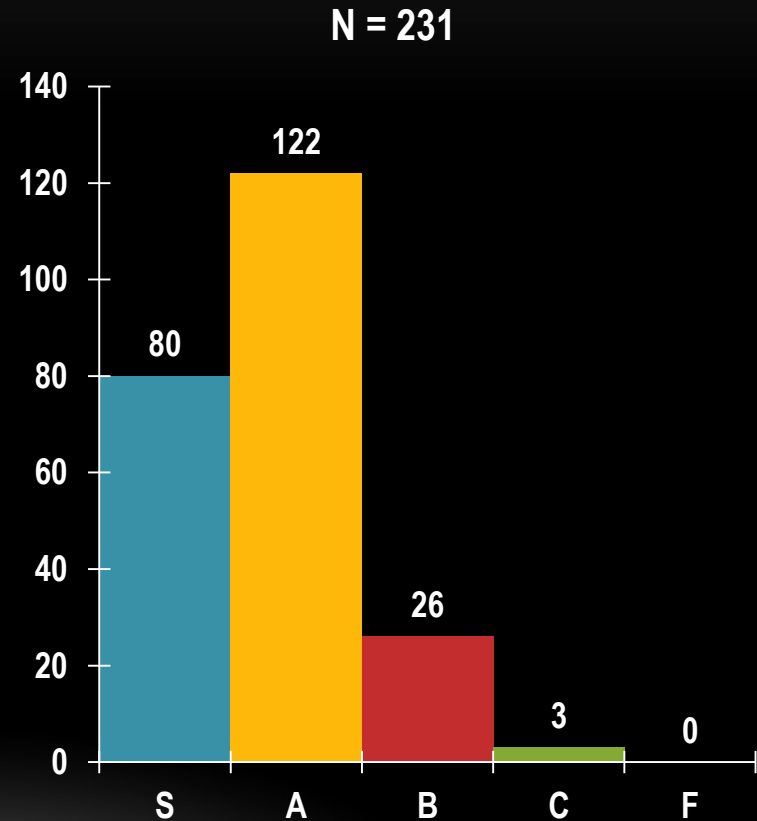
KESTREL A – THE KESTREL

THIS CLASS OF SHIP WAS DECOMMISSIONED FROM FEDERATION SERVICE YEARS AGO. AFTER A NUMBER OF REFITS AND UPDATING, THIS CLASSIC SHIP IS READY FOR BATTLE.



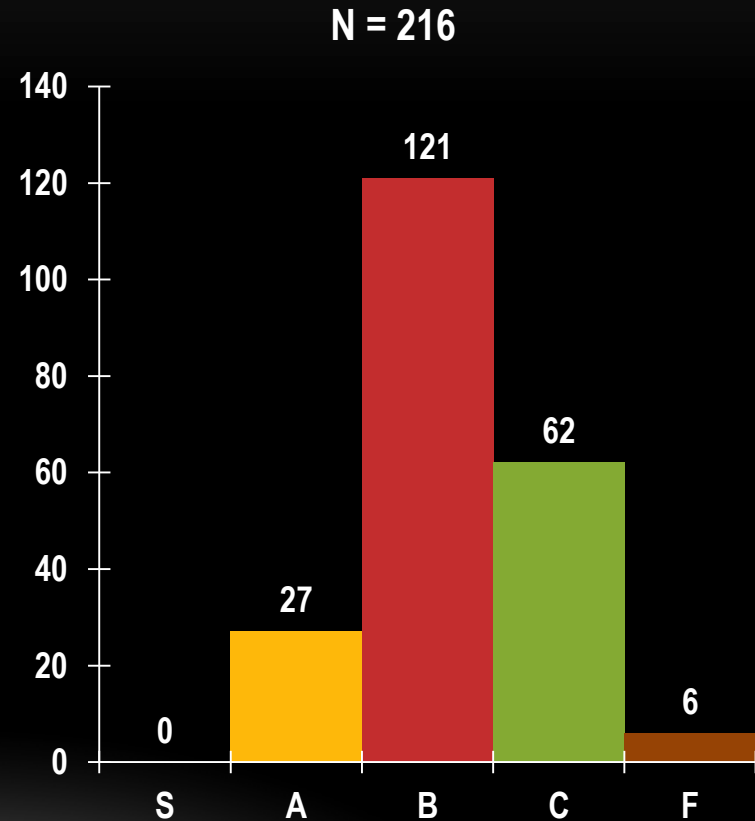
KESTREL B – RED-TAIL

THIS MODIFIED KESTREL-CLASS SHIP WAS CREATED BY A LASER WEAPON AFICIONADO.



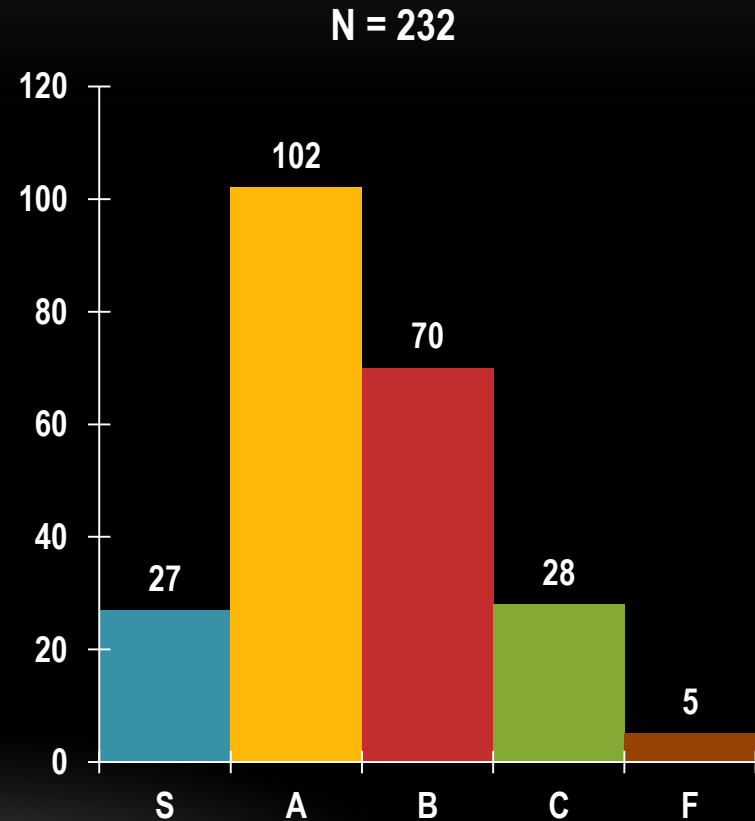
KESTREL C – THE SWALLOW

THIS MODEL WAS MODIFIED BY PIRATES TO UTILIZE NEWLY DISCOVERED TECHNOLOGY. IT CAN CLONE LOST CREWMEMBERS AND STUN ENEMIES.



ENGI A – THE TORUS

ALTHOUGH IT MAY LOOK LIKE A PILE OF JUNK LOOSELY HELD TOGETHER, THIS WELL-DESIGNED SHIP RELIES ON DRONES AND ION WEAPONRY.



ENGI B – THE VORTEX

HEAVILY UNDERSTAFFED, THIS SHIP RELIES ON DRONES TO KEEP THE SHIP RUNNING.

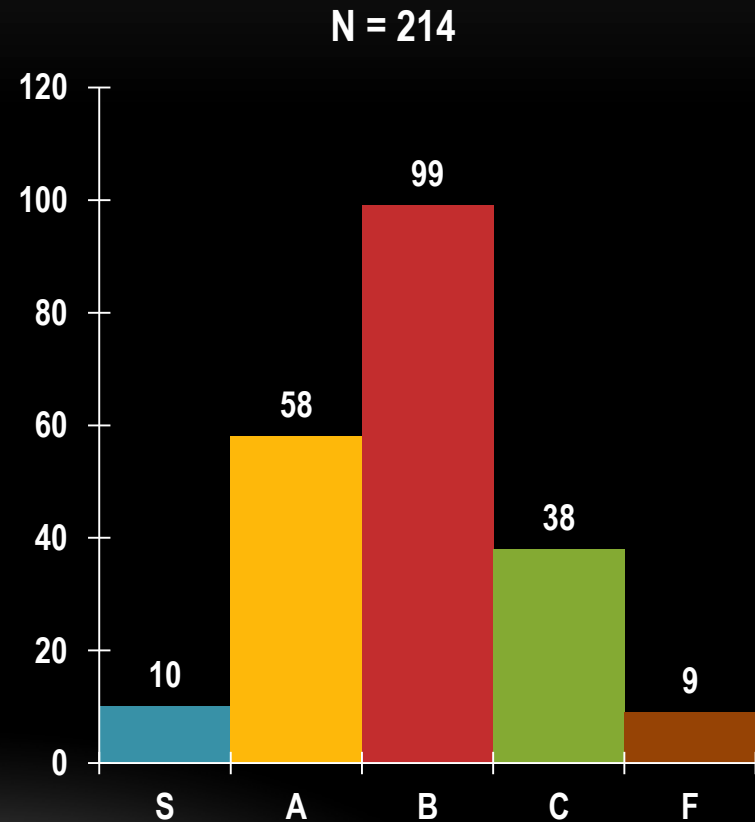


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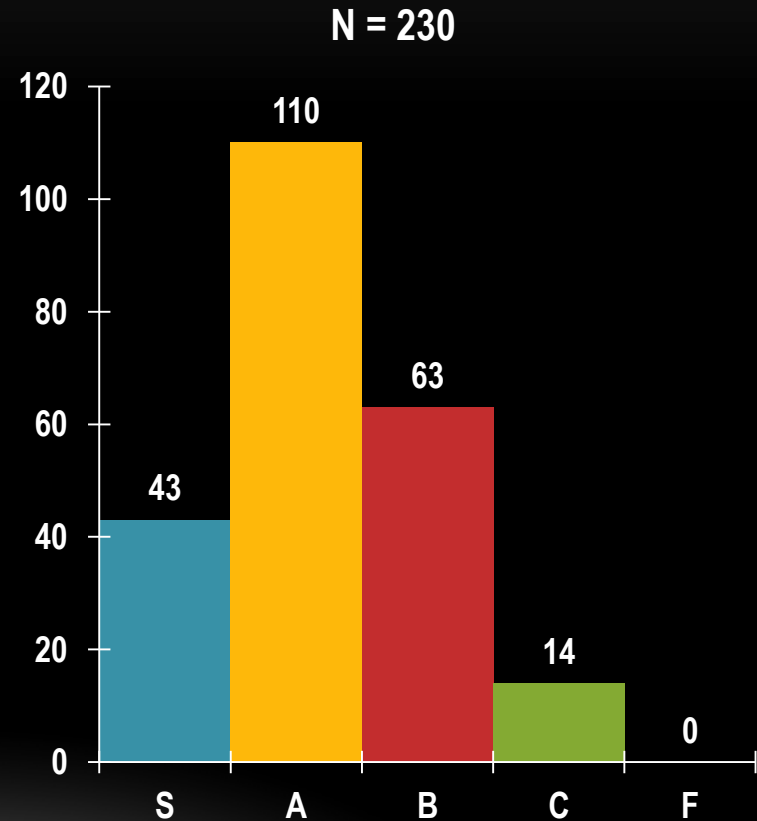
ENGI C – TETRAGON

THE ENGI WERE QUICK TO ADAPT TO THE SUDDEN SURGE OF HACKING TECHNOLOGY—THIS SHIP IS THE RESULT OF THEIR RESEARCH.



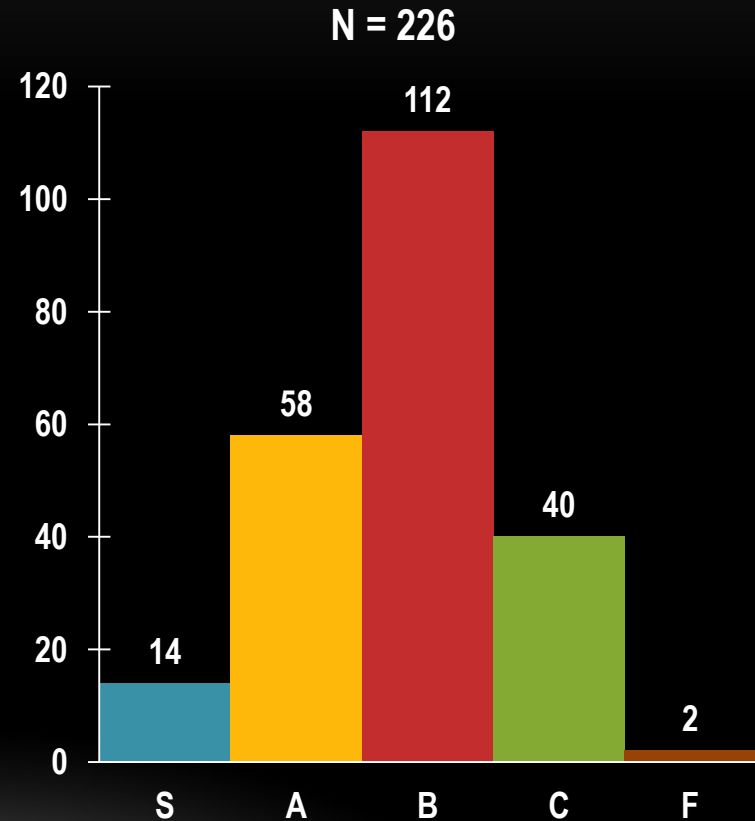
FEDERATION A – THE OSPREY

THIS SHIP FEATURES THE LATEST IN FEDERATION TECHNOLOGY: AN ADVANCED BEAM WEAPON THAT PIERCES THROUGH SHIELDS!



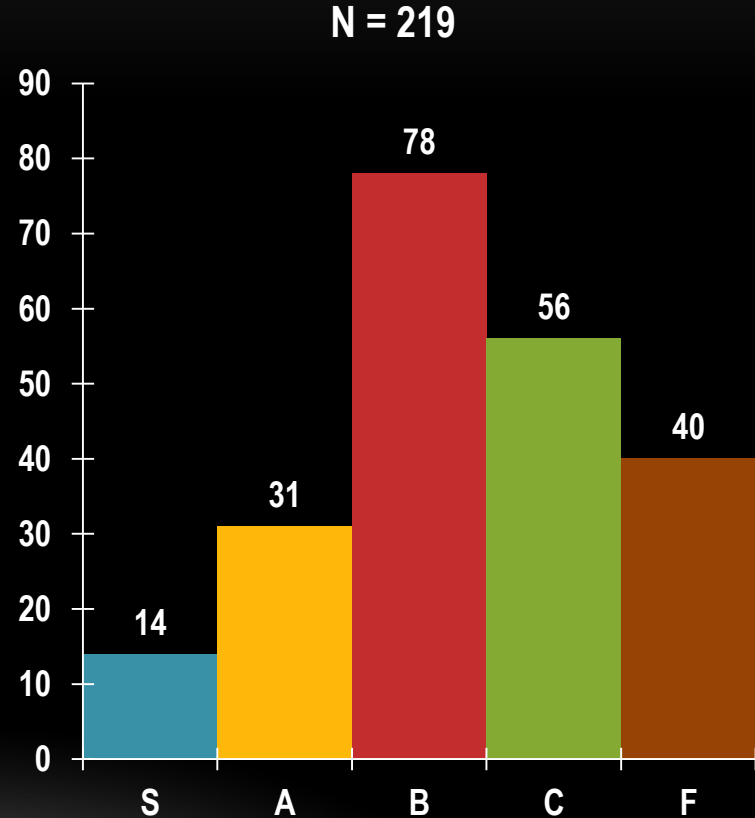
FEDERATION B – NISOS

THIS SHIP FEATURES ADDITIONAL ARTILLERY POWER, ENCOURAGING HEAVY RELIANCE ON THE BEAM.



FEDERATION C – THE FREGATIDAE

WITH A FLAK ARTILLERY WEAPON AND AN IMPROVED CLONE BAY, ONLY THE MOST SUICIDAL OF INFANTRY CHOOSES TO FLY ON THIS SHIP.

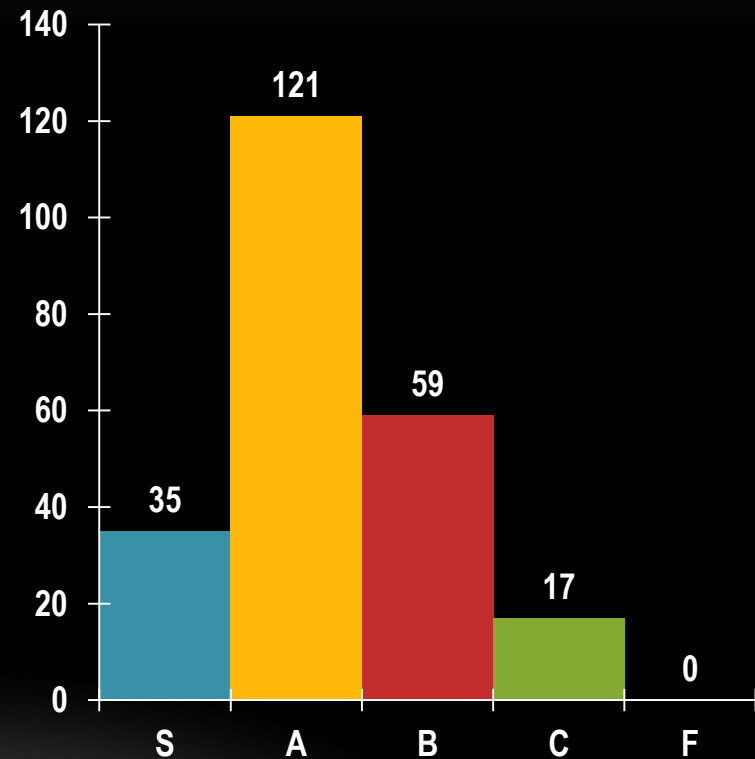


ZOLTAN A – THE ADJUDICATOR

THE ZOLTAN'S ADVANCED SHIELDS TECHNOLOGY GIVE THIS SHIP AN EDGE DURING EACH BATTLE.

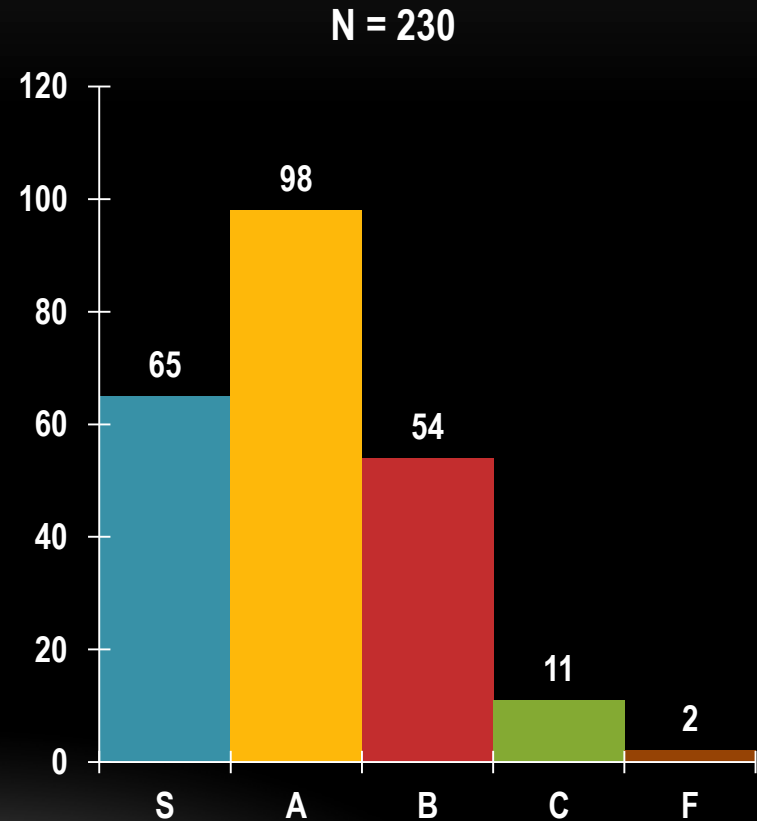


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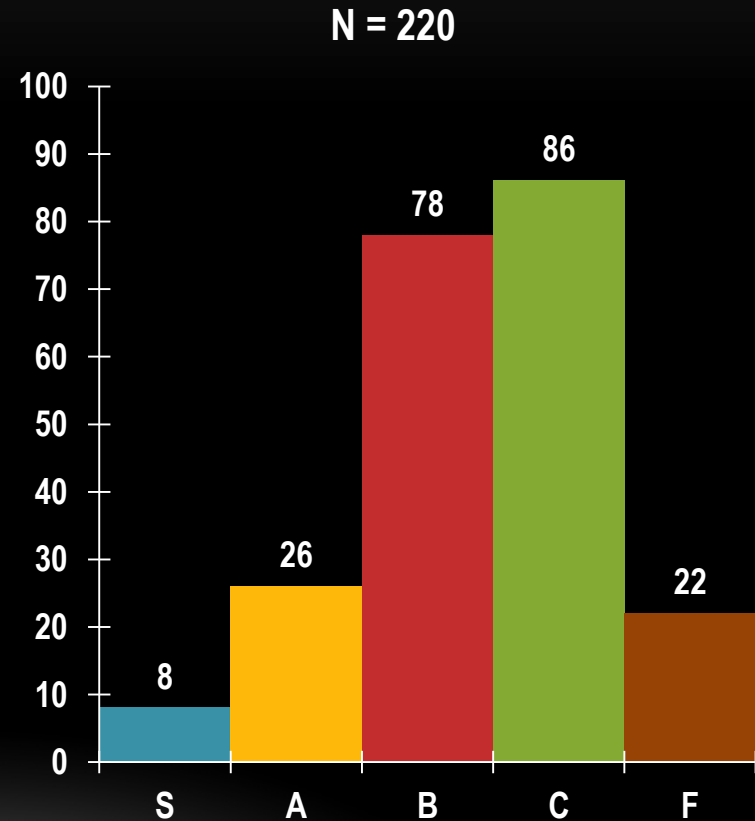
ZOLTAN B – NOETHER

THIS SHIP STARTS WITH A WEAKENED SHIELD SYSTEM AND MUST RELY ON ITS SUPER-SHIELD.



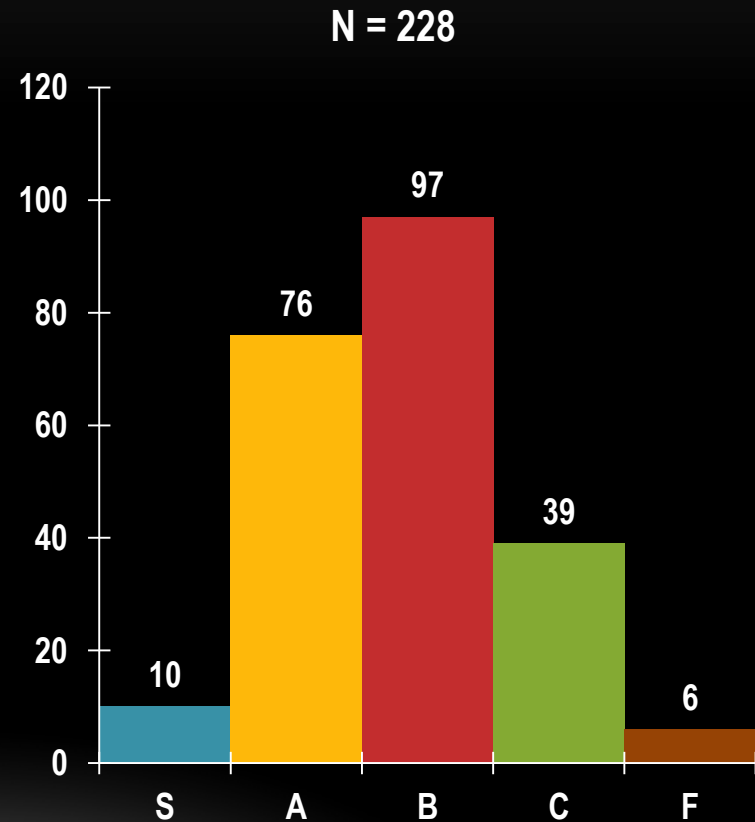
ZOLTAN C – CERENKOV

THE DESIGNER OF THIS SHIP WAS NOT WILLING TO SPEND THE MONEY FOR A DECENT REACTOR. INSTEAD IT RELIES ON ITS ZOLTAN CREW AND BACKUP BATTERY.



MANTIS A – THE GILA MONSTER

THIS WARSHIP IS DESIGNED TO ENHANCE ITS CREW FOR CLOSE COMBAT MISSIONS.

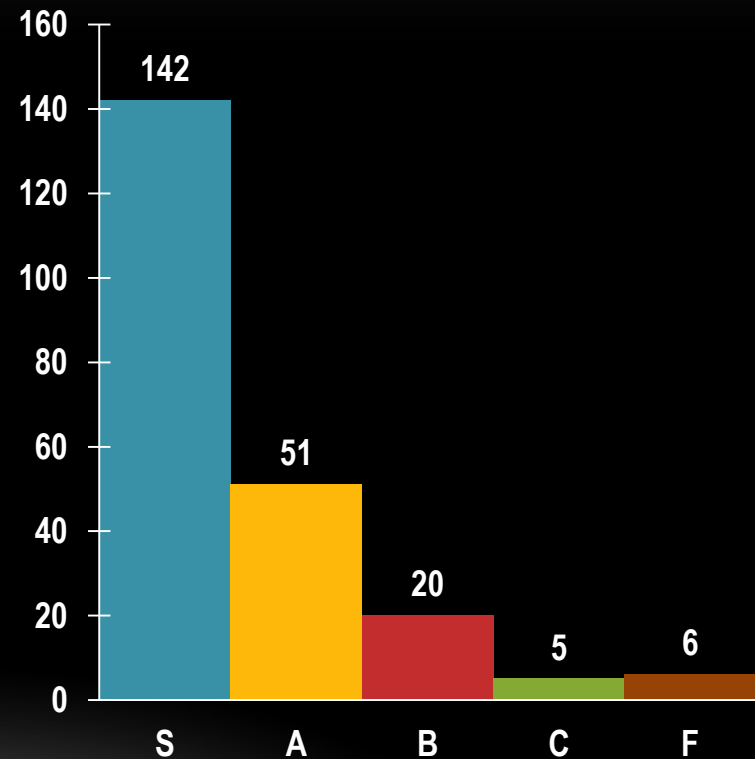


MANTIS B – THE BASILISK

THIS WARSHIP ENCOURAGES SENDING MASSIVE BOARDING PARTIES AND KEEPING STRONG DEFENSE.

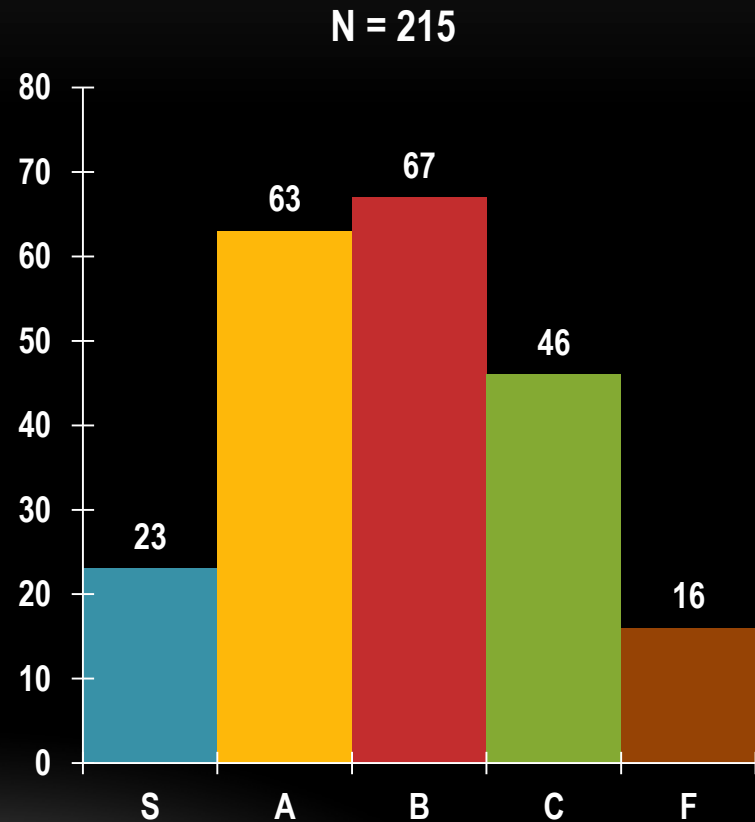


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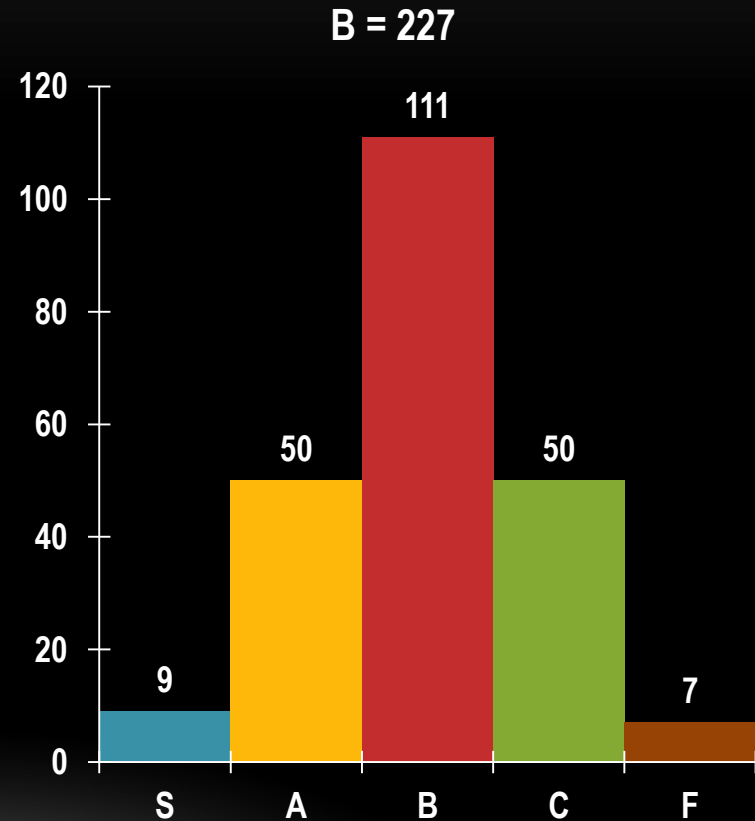
MANTIS C – THE THESEUS

WITH A LARGE TELEPORTER AND WEAPONS DESIGNED TO IMPEDE ENEMY CREW, THIS SHIP IS DEADLY IN THE HANDS OF A CAPABLE BOARDING PARTY.



SLUG A – MAN OF WAR

DESIGNED FOR USE INSIDE NEBULA, THIS CRUISER LACKS SENSORS AND RELIES INSTEAD ON THE GUILE AND CUNNING OF THE SLUGS.

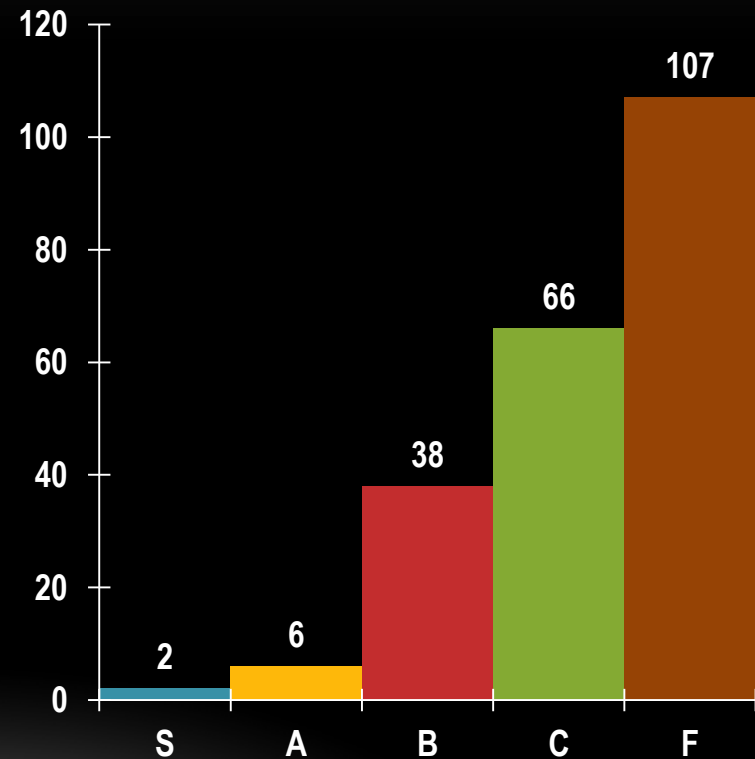


SLUG B – THE STORMWALKER

THIS BOARDING SHIP HAS NO MEDICAL FACILITIES AND MUST MANAGE ITS EXPLOSIVES CAREFULLY TO KEEP THE CREW ALIVE.

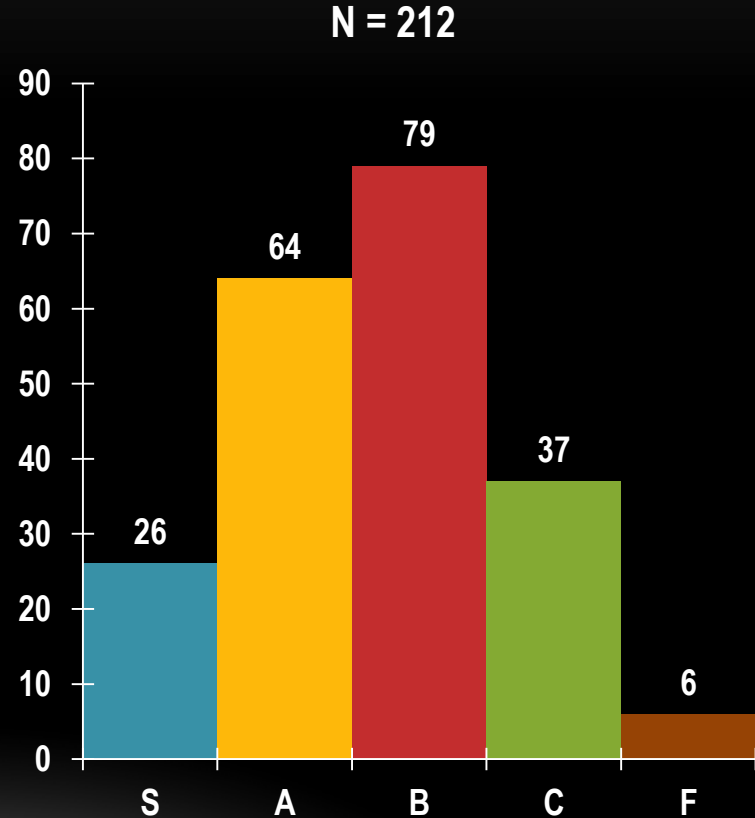


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SLUG C – ARIOLIMAX

SLUGS ARE OFTEN SKILLED IN THE ARTS OF MISDIRECTION AND MANIPULATION. WITH HACKING AND MIND CONTROL SYSTEMS, THIS SHIP CAPITALIZES ON THAT FACT.



ROCK A – BULWARK

SIMILAR TO ITS DESIGNERS, THIS SUPER DENSE BEHEMOTH USES BRUTE FORCE TO OVERWHELM ITS FOES.

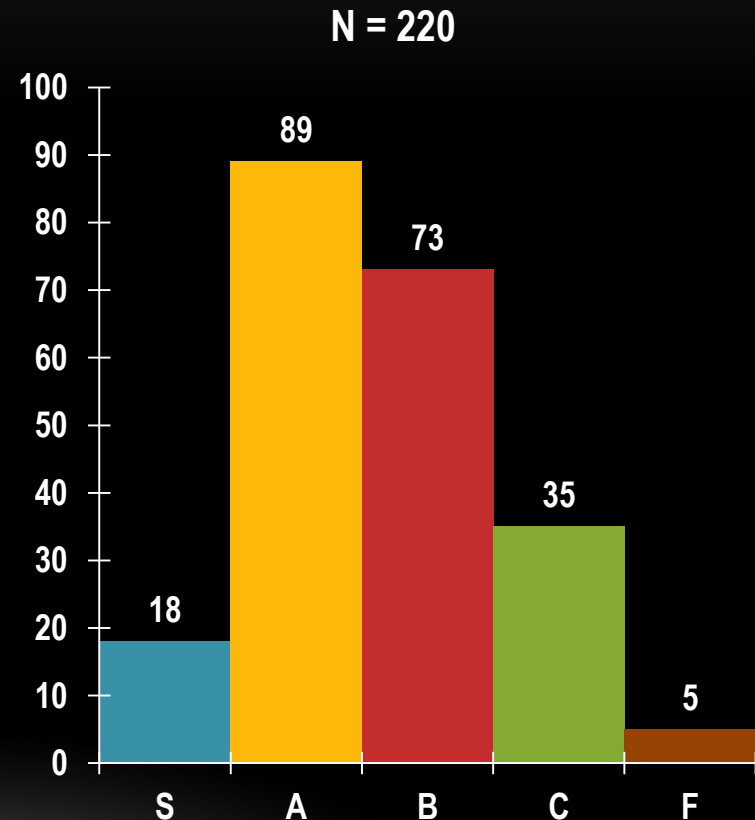


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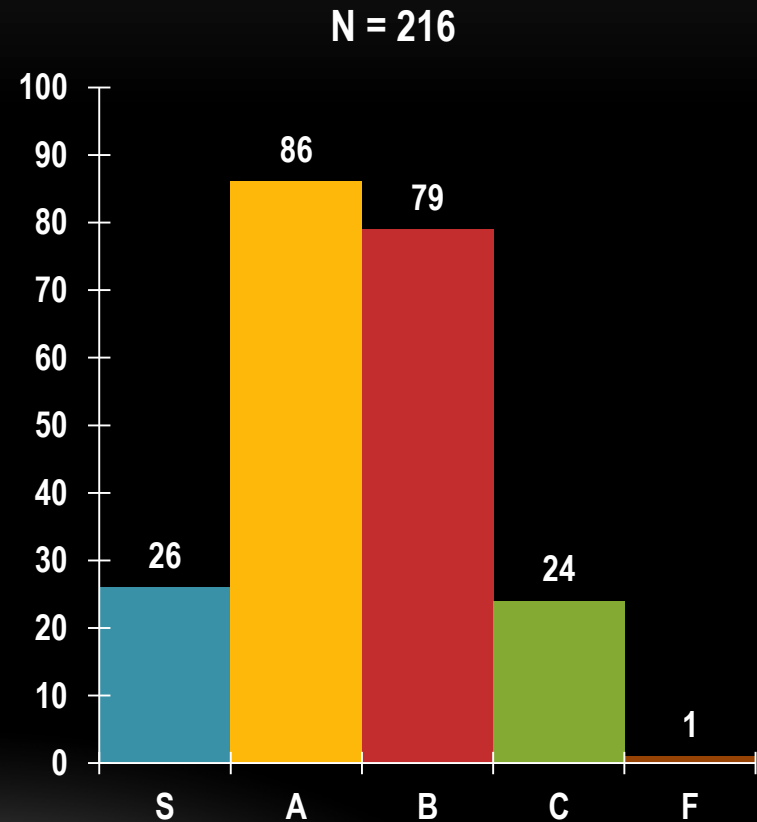
ROCK B – SHIVAN

WITH NO AIRLOCKS, THIS SHIP MUST RELY ENTIRELY ON ITS ROCK CREW TO PUT OUT FIRES.



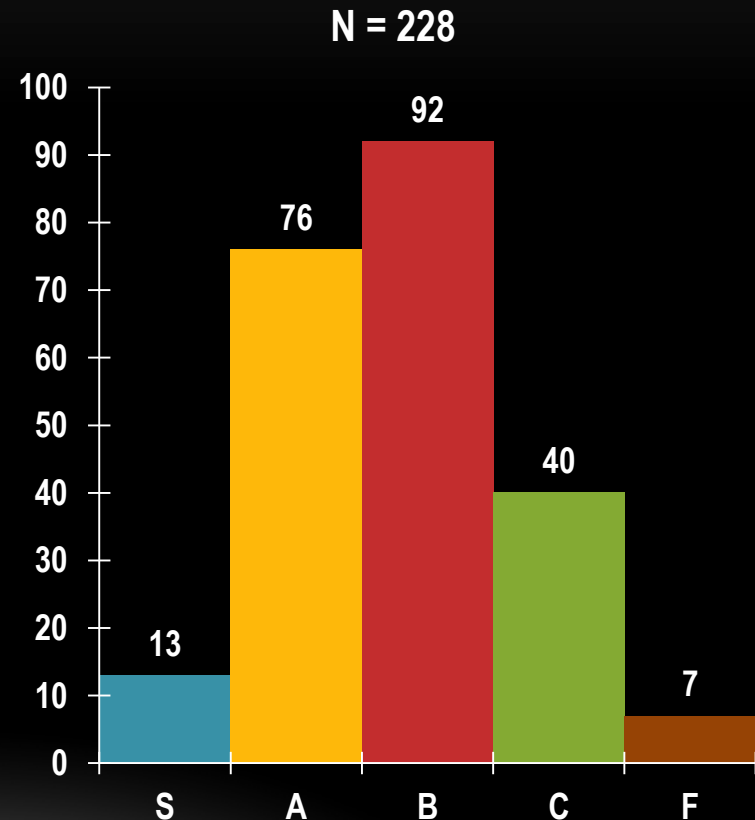
ROCK C – TEKTITE

CONTACT HAS BEEN MADE WITH THE CRYSTALLINE RACE AND THIS CRUISER WAS OFFERED TO THE FEDERATION AS PART OF DIPLOMATIC DISCUSSIONS BETWEEN THE SISTER SPECIES.



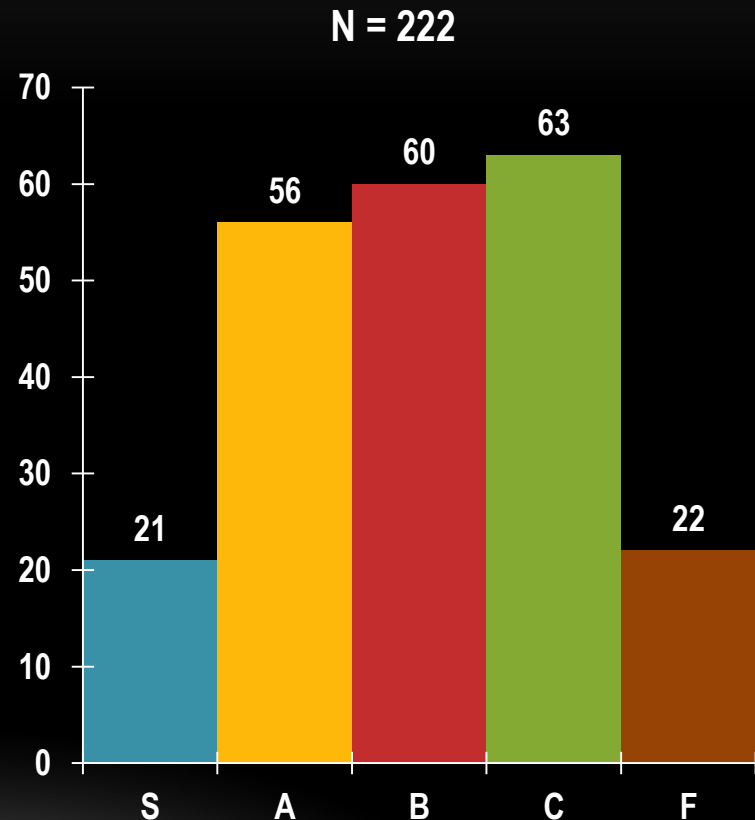
STEALTH A – THE NESASIO

CONSTRUCTED FOR THE FEDERATION BY THE ENGI, THIS SHIP IS DESIGNED TO USE CLOAKING TECHNOLOGY AND SPEED TO GET BEHIND ENEMY LINES.



STEALTH B – DA-SR 12

BUILT LIKE A GLASS CANNON, THIS SHIP IS HARD TO HANDLE. IF ITS CLOAKING CAN KEEP IT SAFE LONG ENOUGH TO CHARGE ITS WEAPON, FEW CRUISERS CAN WITHSTAND ITS MIGHT.

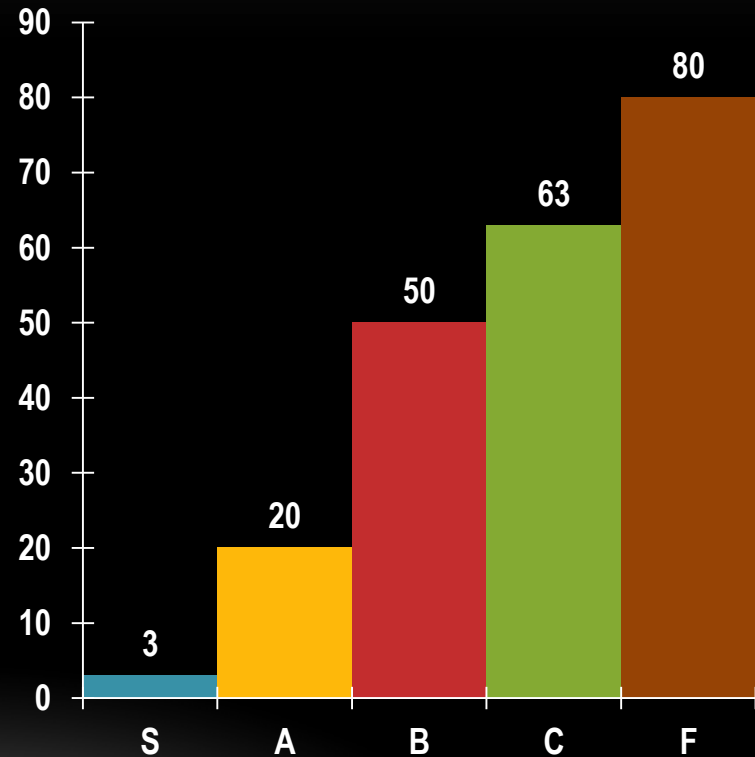


STEALTH C – SIMO-H

THIS SHIP WAS PART OF AN ENGI EXPERIMENT TO MAKE A POWER EFFICIENT VERSION OF THE ZOLTAN SHIELD. UNFORTUNATELY, THIS REQUIRED THE REMOVAL OF THE CLOAKING SYSTEM.

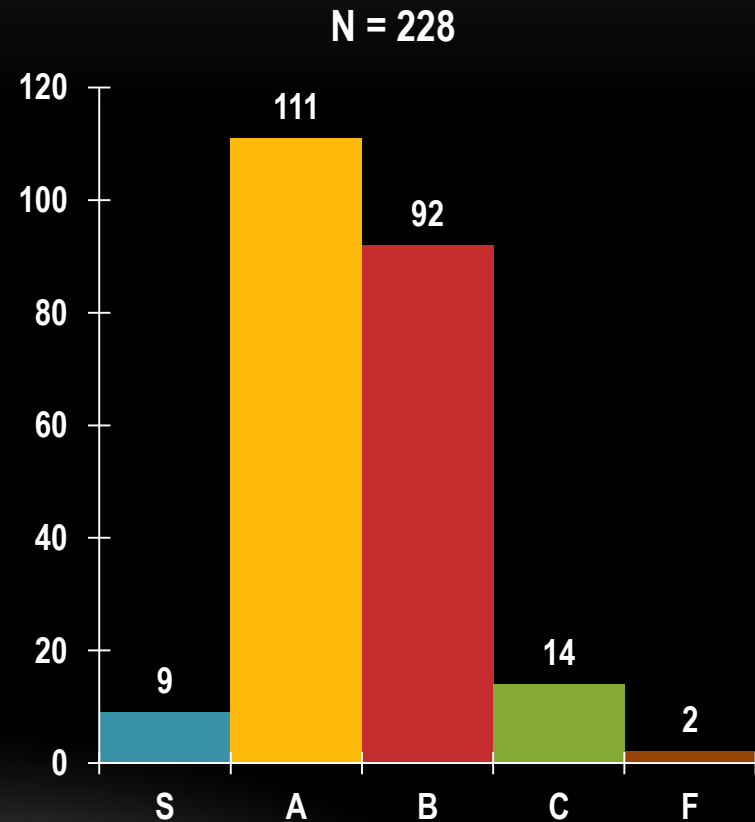


N = 216



LANIUS A – KRUOS

THE SHARP KNIFE-LIKE STRUCTURES MAKE LANIUS SHIPS A SIGHT TO BEHOLD. THIS CRUISER WAS ADAPTED TO SUPPORT THE OTHER RACES OF THE FEDERATION.

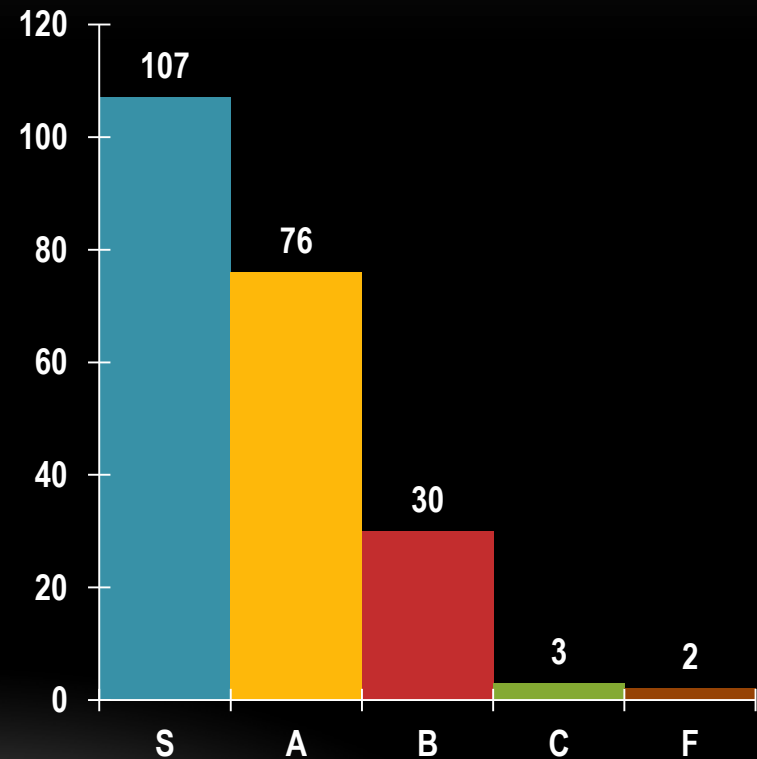


LANIUS B – THE SHRIKE

THE RACIAL ABILITY OF THE LANIUS MAKE THEM FEARSOME COMBATANTS IN SMALL QUARTERS. COMBINE THAT WITH A MIND CONTROL SYSTEM AND THIS SHIP IS A FORCE TO BE RECKONED WITH.



N = 218

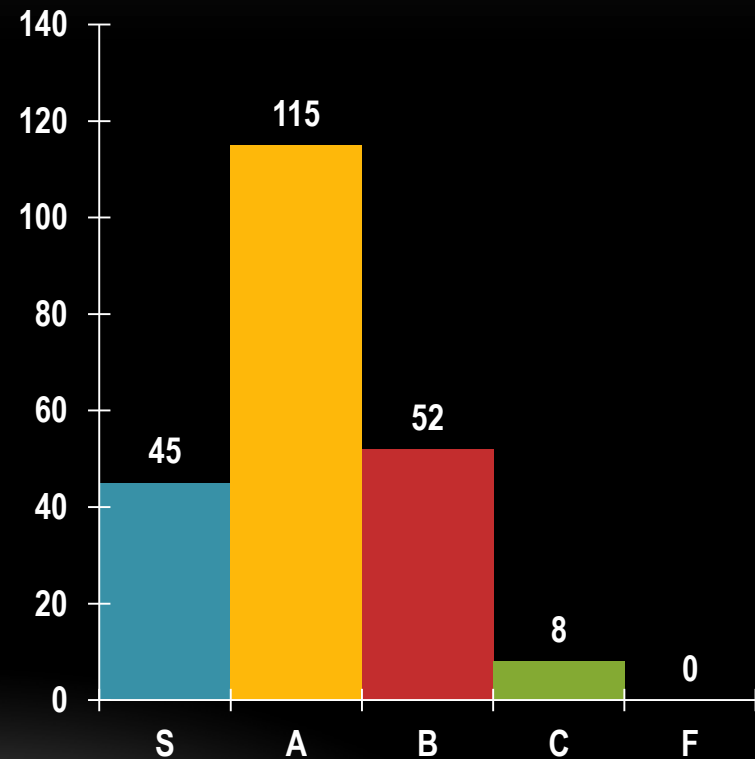


CRYSTAL A – BRAVAIS

THIS POWERFUL VESSEL IS POWERED BY THE SECRET TECHNOLOGIES OF THE LOST CRYSTALLINE BEINGS.



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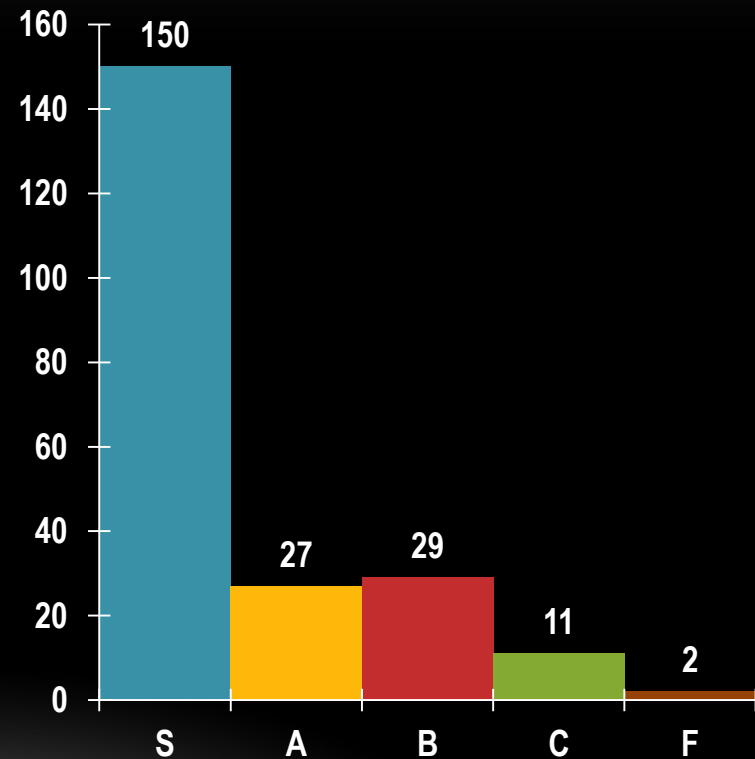


CRYSTAL B – CARNELIAN

THEIR UNIQUE RACIAL ABILITY MAKES THE CRYSTAL BEINGS VERY ADEPT AT SHIP BOARDING. THIS SHIP WAS DESIGNED FOR SUCH RAIDING PARTIES.



N = 219



Comments or questions? See Sigmapolis on the Reddit community for FTL

THANK YOU